



small rockets™

4x4 OFF ROADERS

Game Proposal

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Introduction

4x4 Off-Roaders takes you racing on some of the most fearsome, challenging environments on earth. There's a road, but no-one says you have to stick to it. The only aim is to race to the finishing point faster than anyone else - how you do it is entirely up to you.

Using voxel technology, 4x4 Off-Roaders creates a world like no other seen before on the Game Boy Advance. Rolling hills, steep valleys, sudden ravines - you can go anywhere in one of the 12 powerful 4x4 vehicles available. The game combines realistic-feeling physics with accessible game play, and longevity is provided by a range of single player modes and the possibility to link up to four human players via link cable.

With a 3D world unique on the Game Boy Advance, 4x4 Off-Roaders sets the benchmark for portable racing titles.

Key features

- Arcade-style off-road 4x4 racing and rallying
- Utilizes fast voxel technology to allow full 3D environment and vehicles to be realised on the Game Boy Advance
- 7 varied environments from around the world, including desert, cross-country and snowy landscapes.
- 3 single player leagues to compete in from Amateur to Professional.
- 20 unique and individual characters to race against with international racer bios.
- In-game messages from AI characters taunting and teasing you while you race.
- A realistic physics model allows the car to react in the correct way to the environment but is kept sufficiently simple to promote an easy arcade feel.
- Vehicle can roll around the landscape when it loses control but will always self-right itself, avoiding annoying stop/start play of previous racers.
- 12 different vehicles to select from, ranging from 4x4 ATV to off road buggies - each with their own unique characteristics in terms of look, stability, speed and maneuverability.
- Different types of surfaces which cause the car to react differently - snow/ice/water/grass/dirt and track all have their effect on the cars' behaviour and control.

- Single player checkpoint racing with no holds barred anywhere/anytime racing, single player time-trial and bonus events, single player Slalom and Balloon Burst.
- Multi-player checkpoint racing, bomb tag and capture the flag, allowing up to 4 players to compete via linkup, with a limited option also for single cartridge multi-player.
- Bonus vehicles, characters and tracks become available as the player progresses through the leagues.
- High score table for each track and separate high score for time trial.

Overview of the game

The International 4x4 Offroader Challenge is legendary. Only the best racers from around the world compete in one of the most dangerous races around to get the coveted prize, the Offroader Cup.

A myriad of characters from each corner of the globe meet up to compete in 3 stages known as the Amateur/Seasoned and Professional Leagues. The racers can drive any 4-wheeled vehicle they choose and as the locations tend to be rough the vehicles are mostly 4-wheel drive.

There are no rules in the race - only the winning is important. The races consist of a series of checkpoints that have to be raced through in a specific order. Each racer is aware of only the current checkpoint they should be racing towards and once within a certain distance of the target checkpoint they are notified of the next checkpoint.

At random points during the leagues, the player may be challenged to a special bonus event. For example, in the Slalom event the player has to race to the finish line and weave between as many red and green flags as possible; beating the current record gives the player access to bonus vehicles and tracks.

Control and environment

Control of the vehicles is kept simple; accelerate, brake and steer left/right are the main controls. A handbrake is also available for tight cornering. A physics model represents the behaviour and is simplified to provide greater control and a more intuitive arcade feel. If the players vehicle topples over it will roll to level ground where it ensures that it self rights itself to allow the player to continue racing as soon as possible.

Progression

In single player mode the progression of the game is handled through a set of 3 leagues:

The Amateur League

- 5 races
- Checkpoints are kept mainly to the safe tracks to allow novices to get accustomed to driving the vehicles within the environments.

- The abilities of the AI cars (speed, skill, aggression etc) are relatively poor.
- The player must finish in the first 3 in each race to progress. (The player is given 3 chances to fail ("continues") per league.)

The Seasoned League

- Once the Amateur League has been completed the Seasoned League is opened up along with the ability to select more robust and faster vehicles.
- 6 tracks in total and the checkpoints are located more off road.
- The abilities of the AI cars are average.
- The player will have to finish 1st or 2nd place to move onto the next race and ultimately progress to the next league. (Again, 3 continues are allowed.)

The Professional League

- After the Seasoned League has been completed the Professional League opens up. This is the most extreme and dangerous of the leagues, with more vehicles being made available at this point.
- Checkpoints placed in precarious locations within the environments, requiring skill to navigate the most effective route between each one.
- The abilities of the AI cars are good.
- Races are longer and the player must finish 1st in each race to continue, with 3 continues allowed.

The bonus events contained in each league include single player slalom, and timed balloon burst, which if completed within a certain limit open up bonus vehicles/tracks. There is no placing requirement for bonus races.

If the player fails a race then they have another 2 attempts before being ejected from the league.

A player can at any time decide to try a time trial on any of the opened tracks, or race for best times to open up bonus items.

Game modes

Single Player League

As defined in overview of the game this is the main single player thread of the game.

Single Player Time Trial

Players can race on tracks that have been opened either for practice or to beat a current high score. Sometimes bonus items will become available when tracks have been completed within a certain time limit.

Multi-player Multi-Cartridge Linkup

If 2 or more players wish to play multi-player and they each have a 4x4 Offroaders cartridge, then one of players can host the linkup by selecting Multi-

Cartridge Linkup. Here the host can select from 1 of 3 event types - Race, Bomb Tag, Capture The Flag.

The host then selects a track (only opened ones are available) then selects their own vehicle before moving onto the connection screen waiting for all players to start.

Join Multi-Cartridge Linkup

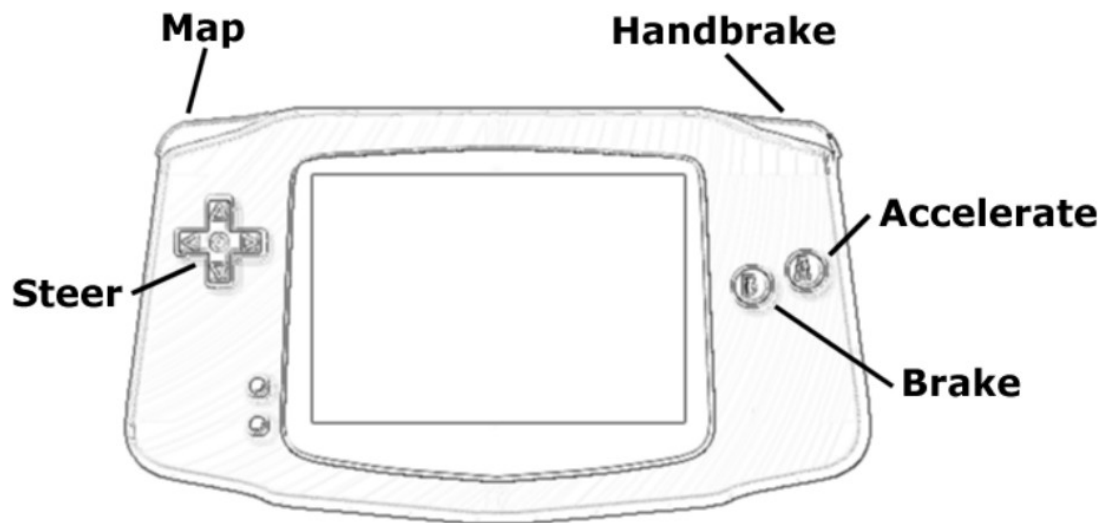
If 2 or more players wish to play multi-player and they each have a 4x4 Offroaders cartridge, 1 or more of the players can join a host. Once a host has set up a game, the players can then join by selecting Join Multi-Cartridge Linkup. The connection screen will be displayed and once host has set up the game type, track and selected his vehicle the other players can select their vehicle (limited to vehicles opened on host's cartridge).

Multi-player Single Cartridge Linkup

If 2 or more players wish to play multi-player but only have 1 cartridge then a limited multi-player game can be played. The host first selects the game type, track and vehicle and the other players will play on that track with the same vehicle type.

The tracks are smaller than the multi-cartridge linkup because of RAM limitations.

Control



Controlling vehicles in 4x4 Offroaders is kept to an intuitive and simple control mechanism, the A button is defined as accelerate and B as brake/reverse. Handbrake is located on the right shoulder button and a larger, scrollable map on the left shoulder button. Steering is through the directional pad left/right while up/down have no function.

All the keys except for the steering can be redefined to the player's preference.

Vehicle features

At the beginning of the game the player can select from 4 vehicles only, but as the leagues progress other vehicles will become available too. There are 12 vehicles in all, and each vehicle has the following varying characteristics:

- Acceleration
- Top speed
- Maneuverability - affects the steering of the vehicle
- Traction - affects the friction of the tires

The vehicles in each league are balanced and increase in performance across leagues.

(Opponent performance will also be affected by the features of the character driving - eg. aggressiveness.)

Rolling

One of the perils the player faces while driving over the landscapes at speed is the constant threat of overturning.

Once the player does overturn they will go into a roll which will automatically self right to allow the player to continue racing as soon as possible. This automatic self-righting avoids the annoying stop/reposition/start nature of many traditional racing games.

Special event types

Single Player Bonus - Slalom

This bonus event gives the player the ability to open hidden vehicles, tracks by racing as fast as possible between red and green flags.

Single Player Bonus - Balloon Burst

This bonus event gives the player the ability to open hidden vehicles, tracks by bursting as many balloons on the landscape as possible before the countdown expires.

Multi-player Race

Straight forward checkpoint racing with linked players only, no AI players.

Multiplayer Bomb Tag

Race as normal but a ticking bomb is passed between players until either race is won or all but one player knocked out through bombs exploding. Throughout the landscape there are bomb reset checkpoints to reset bomb counters.

Multiplayer Capture The Flag

Here the players must compete to capture the flag and drop it off at a designated point, with a set number of flags and drop-off points are placed one after another on the landscape. The player with the most number of drops wins. Players can force others players to drop the flag by crashing into them at speed.

Surfaces and other key course features

Course features can be divided into certain common features that re-occur from track to track, and others that are unique to particular environments. The main features are:

Tarmac

The track is the official route mostly used by amateurs and when full traction is required.

Dirt

Usually denoting unofficial tracks, traction is not as good as tarmac especially when turning at high speeds.

Grass

Usually surrounds areas that are near water, has less grip than dirt and offers practically no traction in wet weather.

Water

Areas of water within the environments are always shallow and have a tendency to cause aquaplaning when driven through straight at high speeds.

Snow

Has moderate traction when driven through slowly, practically no traction at high speeds.

Ice

The most treacherous of all conditions with practically no traction at high or low speeds. Ice will cause a vehicle to career off if driven on at high speeds.

Slalom Flags

Used in the Slalom event, red indicating that the player needs to be on the right and green indicating the player needs to be on the left of the flag.

Checkpoints

Checkpoint flags indicate the location the player must drive to.

Multi-player Flag

Used for Capture The Flag multi-player games, these can be picked up by players and dropped at drop points. Players can also knock a player causing them to drop the flag.

Multi-player Drop Point

Drop points used for multi-player Capture The Flag. Once a player has a flag they can drop it off here and the next flag is automatically displayed.

Balloons

Used exclusively for the Balloon Burst bonus events, simply bursts on contact.

Weather

Rain and snow can effect the race course during the game causing a loss of traction of all surfaces.

Environments

As befits a world racing challenge, races take place in a wide variety of environments. Most environments will feature more than one course, with different arrangements of checkpoints.

Sahara

Undulating sand dunes with rocks and maybe an occasional isolated oasis, not overly traction friendly environments, suited to high acceleration/high traction vehicles.

England

Rolling hills, a blend of dirt/track/grass and water. Conditions range from treacherous to excellent, very weather dependant environment. Can get some great results with low traction and high top speed vehicles.

Norway

Mostly snow with some track and some deadly ice, best suited to high maneuverability and high traction vehicles.

Iceland

Grey, volcanic ash surface. Many boulders to avoid - plus the occasional volcanic spring pool.

Florida

Marsh lands with grass and shallow pools, criss-crossed with raised tarmac roads.

Australia

Red earth tracks, with occasional rocky outcrops. Very fast courses.

Swiss Alps

Very rocky, dramatic landscapes – grass and tarmac in the valleys, snow and ice on hill-tops.

Extra challenges, bonuses and secrets

Throughout the single player league bonus events are held such as the single player Slalom and single player Balloon Burst – getting good times in these events opens bonus cars, characters and bonus tracks.

Audio

There will be music tracks for each track and in game digital stereo audio for spot effects and engine sounds.

Technical Features

Graphics

- Voxel technology to create terrain
- Voxel technology used to create full 3D models
- Particles for dust/grass and water
- Sprites for terrain features, eg. rocks and trees.

Sound

- Stereo digital sound for effects, including engine noise.
- Track-dependent music

Online

- 4 player linkup with 3 game modes
- Limited single cartridge linkup with up to four players.

Dynamics

- Vehicle physics model

Summary

4x4 Off-Roaders is a landmark game for the Game Boy Advanced and for handheld gaming consoles in general. A compellingly addictive single player game is combined with a host of multi-player options to create a title that players will return to again and again, long after the 3D engine has made its first stunning impression.